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BASE REALIGNMENT AND CLOSURE MINI RECORDS OF DECISION AND FACT SHEETS FOR STUDY AREAS 17, 18, 23, 35, 36, 37, 40 AND 42 WITH FINAL DECISION FOR STUDY AREA 17 ATTACHED NTC ORLANDO FL
5/13/1999
HARDING LAWSON ASSOCIATES

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Harding Lawson Associates

May 13, 1999
Commanding Officer
SOUTHNAVFACENGCOM
2155 Eagle Drive
North Charleston, SC 29419-9010

ATTN: Ms. Barbara Nwokike, Code 187300

Subject: **BRAC mini-RODs and Fact Sheets**
Study Areas 17, 18, 23, 35, 36, 37, 40 and 42
NTC, Orlando
Contract: N62467-89-D-0317

Dear Barbara:

Enclosed for your review are the (draft) mini-RODs (Decision and Response to Comments) for Study Areas 17, 18, 23, 35, 36, 37, 40 and 42. Also enclosed is the (draft) fact sheet for Study Area 36. The mini-ROD and fact sheet for Study Area 36 should be considered very preliminary, as the site screening report is still being reviewed by the OPT, and the conclusions and recommendations may change somewhat based on comments HLA receives from the Team. Fact sheets have previously been issued for all of the other study areas listed above.

Should you have any questions or need additional information, please call me at (904) 772-7688.

Very Truly Yours,

Harding Lawson Associates

Richard P. Allen
Project Technical Lead

Attachments

cc: Wayne Hansel, Southern Division
Nancy Rodriguez, USEPA Region IV
David Grabka, FDEP
LT G. Whipple, NTC-Public Works Officer
Robin Manning, BEI
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Department of the Navy, Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
North Charleston, South Carolina 29418

FINAL DECISION AND RESPONSE TO COMMENTS
INTERIM REMEDIAL ACTION FOR SURFACE SOIL

Study Area 17, Defense Property Disposal Office, Warehouses, and Motor Pool Parking Area
Naval Training Center, Orlando
Orlando, Florida

Introduction

Study Area (SA) 17 occupies approximately 25 acres in the central part of the McCoy Annex (Figure 1). The site is comprised of Buildings 7178, 7191, 7193, and the adjacent area that formerly served as the Defense Property Disposal Office (DPDO) complex for the McCoy Annex (Figure 2). The site also includes Building 7190, the former Administration and Warehouse building. The southwestern corner of the site is undeveloped, and includes a fenced compound which once served as a motor pool parking area. Historically, a variety of hazardous compounds were stored at this site in underground and aboveground storage tanks as well as metal drums.

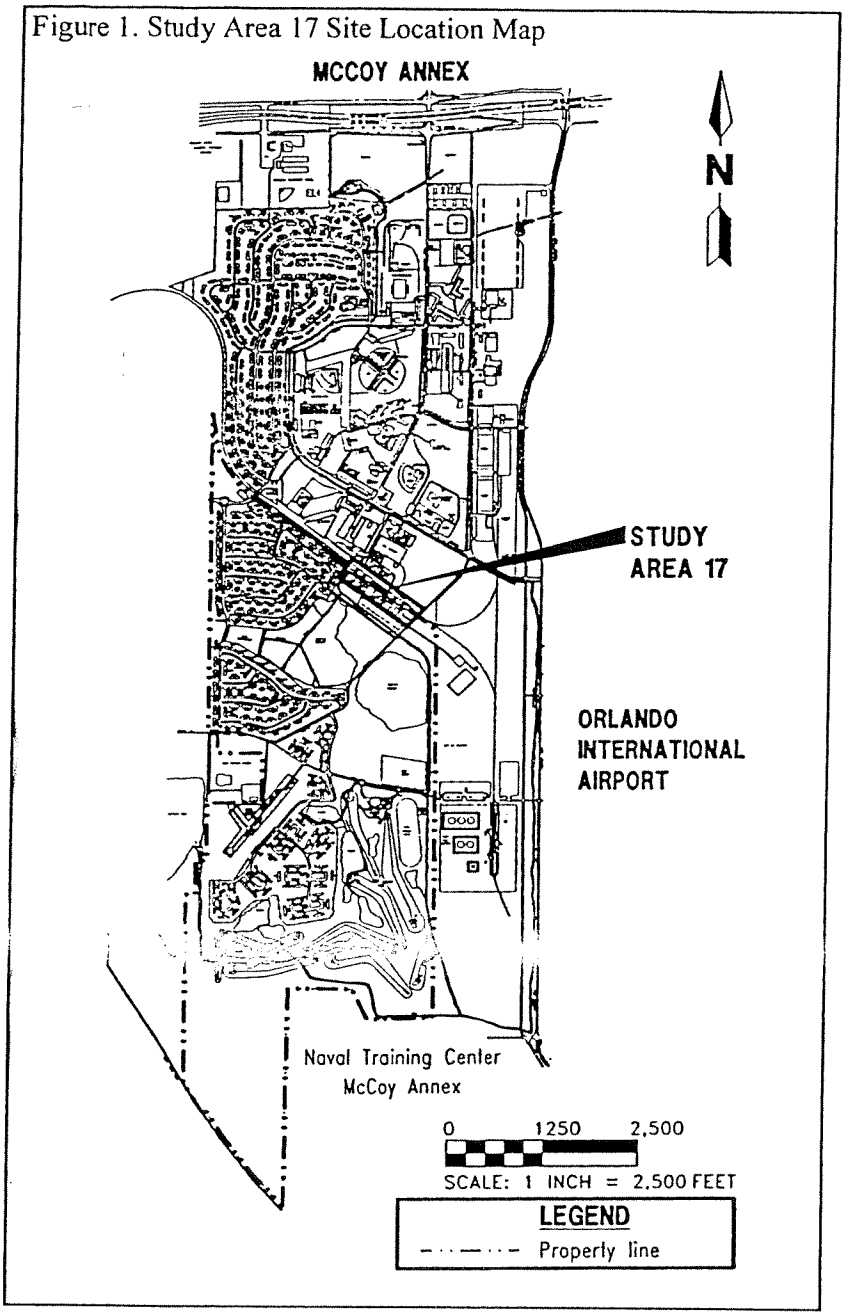
Contaminants above regulatory limits were discovered at SA 17 in both surface soil and groundwater. This document discusses the investigation results for both media, but the proposed remedy and subject of this document will focus only on soil. The Navy, U.S. Environmental Protection Agency, and Florida Department of Environmental Protection are recommending that an interim remedial action (IRA) be performed at Study Area 17 to remediate the soil. The IRA will be completed while final evaluation of the groundwater is in progress, and will involve excavating the contaminated soil and disposing of it off-base in an approved landfill. After the soil is removed, it will be replaced with clean backfill. An IRA is an early cleanup of a specific portion of a site and can be performed prior to completion of investigation activities and data evaluation. IRAs respond to environmental contamination of immediate concern and are sometimes the final action at a site. The IRA at SA 17 will be protective of human health and the environment.

Site Screening Investigation

An environmental site screening investigation was conducted to locate and identify any compounds that may be present at concentrations exceeding screening criteria. Early in the investigation, some of the surface soils at the site were found to have concentrations of polynuclear aromatic hydrocarbons (PAHs) exceeding screening criteria. In addition, the groundwater of the surficial aquifer had concentrations of chlorinated volatile organic compounds (VOCs) exceeding screening criteria. Accordingly, the Orlando Partnering Team requested supplemental screening investigations designed to (1) evaluate and characterize the PAHs in soil, and (2) evaluate and characterize the chlorinated VOCs in groundwater.

Surface Soil Evaluation The field program to evaluate PAHs in soil involved the collection of surface soil samples from locations adjacent to the original soil sampling location(s) that had concentrations of PAHs that exceeded regulatory criteria. The additional sample results permitted better definition of the limits of contamination.

Figure 1. Study Area 17 Site Location Map



Groundwater Evaluation The supplemental groundwater evaluation involved the installation and sampling of monitoring wells in the immediate vicinity of the well where VOC exceedances were initially discovered. Additional wells were installed to delineate the plume and to evaluate plume migration. Surface water and sediment samples were also collected from the drainage canal on the south side of the site to determine whether the plume had migrated to that area. Additional assessment included a lithologic characterization, hydraulic conductivity testing, and groundwater flow measurements.

The results of the groundwater evaluation suggest that the plume originated from at least two source areas located in the north-central part of the former motor pool compound. The plume extends east-southeast from the source areas in the direction of groundwater flow to a distance of approximately 250 feet down-gradient. Analytical results of groundwater samples confirmed that the highest total chlorinated VOC concentration was 65,000 micrograms per liter (µg/l) in one well screened at 20 to 25 feet bls. Vertical migration of contaminants to the base of the surficial aquifer appears to have occurred at three locations. In addition, chlorinated VOCs were detected in the surface water and sediment samples collected in the drainage canal along the southern boundary of SA 17.

Recommendations The Navy recommends, and the EPA and FDEP concur, the following:

- the surface and subsurface soil where PAH concentrations exceed screening limits be excavated and removed for disposal off site
- a natural attenuation (NA) assessment be performed to evaluate whether or not NA is a viable remedial alternative for the chlorinated VOC plume in groundwater
- a Preliminary Risk Evaluation (PRE) be performed to determine the risk of exposure to contaminants in the drainage canal
- the results of the NA assessment and the PRE should be used to determine the need for a Focused Feasibility Study

Selected Remedy for Soil

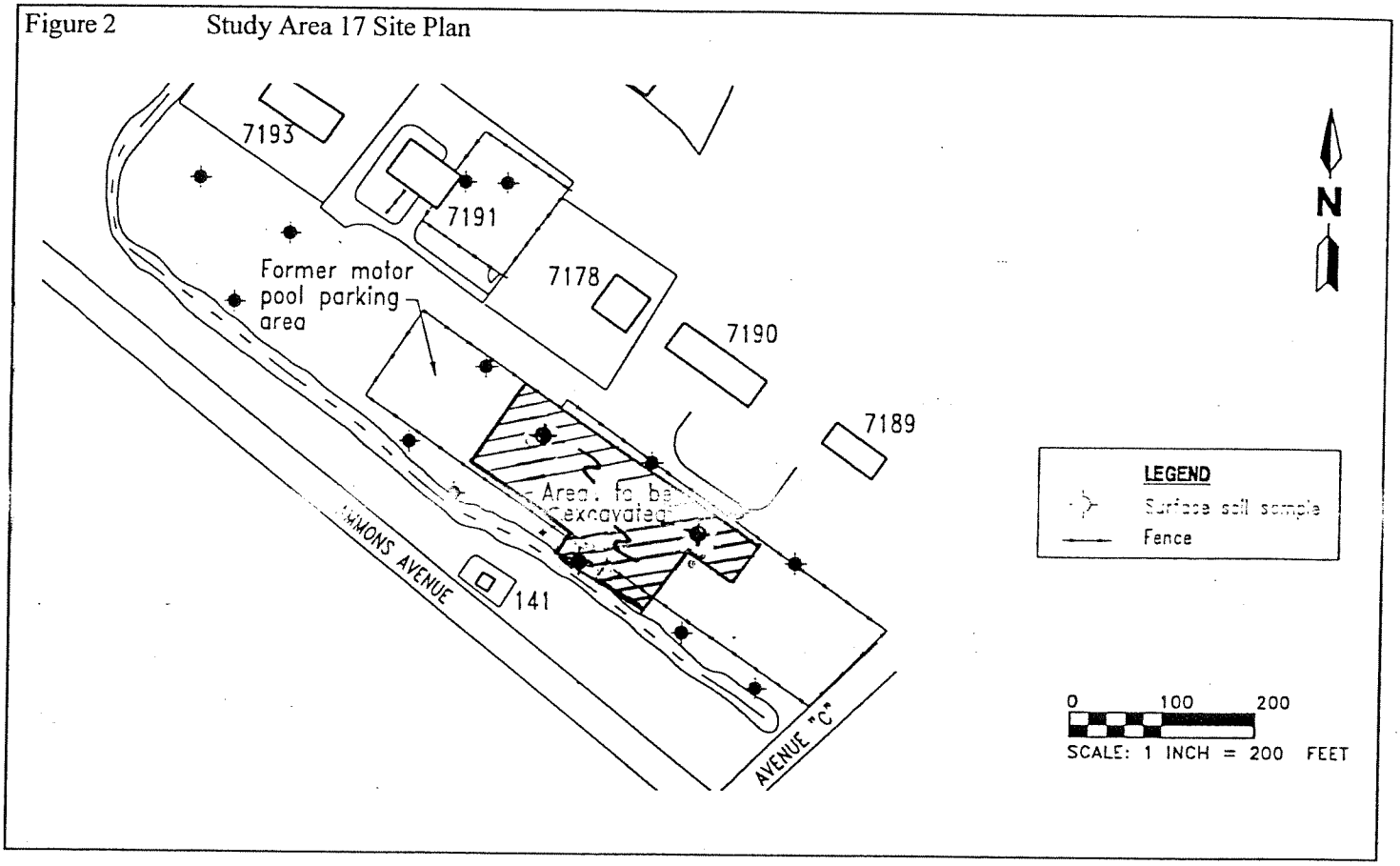
To identify the selected remedy for SA 17, applicable regulations and guidance documents were considered. Based on this review and the recommendations of the site screening report, a remedial approach to SA 17 has been selected, and was presented in the SA 17 Fact Sheet (HLA, 1998). The approach consists of an interim remedial action (IRA) that consists of soil removal of PAH-contaminated surface soil. These actions are discussed below.

Proposed Interim Remedial Action The Navy proposes, and the USEPA and FDEP concur, that the surface and subsurface soil where PAH concentrations exceed screening limits be excavated and removed for disposal off site. This will result in the excavation of an area approximately 300 feet long by 150 feet wide. The excavation will extend to a depth of at least 24 inches below grade.

After excavation has been completed, confirmation samples will be collected and submitted to an analytical laboratory for PAH analysis to verify that all the contamination has been removed. As a minimum, one sample will be collected from each wall of the excavation.

The reuse plan for this area of McCoy Annex is non-residential, so any cleanup will be conducted accordingly. The volume of the excavation described above would be approximately 2,700 cubic yards, but more soil will be excavated if confirmation sample results indicate that additional soil exceeds regulatory criteria.

Figure 2 Study Area 17 Site Plan



Community acceptance of the selected remedy has been evaluated through presentations to the facility's Restoration Advisory Board (RAB). RAB meetings are open to the public and their bimonthly meetings are publicized in the *Orlando Sentinel*. The public was given an opportunity to comment on the remedy selected for SA 17 via distribution of a fact sheet in early December 1998 to the NTC, Orlando Community Mailing List, comprised of more than 300 interested citizens and community leaders. The public was also invited to attend the RAB meeting on January 20, 1999. The fact sheet summarized the selected remedy and invited written comment from the public until January 20, 1999. A public availability session would have been held following the January 20 cutoff date if there had been sufficient community interest. However, there were no comments from the public on the selected remedy.

Declaration

Based on the administrative record compiled for this corrective action, the Navy has determined that the remedy selected for SA 17 is appropriate and protective of human health and the environment and complies with Federal and State regulatory requirements. The FDEP and USEPA concur with the remedy selected.

SIGNATURE.

Wayne Hansel, P.E.
Base Realignment and Closure Environmental Coordinator

Date